**PATENT** 

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Tuomanen et al.

Confirmation No.: 2930

10/751,702

Group Art Unit: 1645

1/5/04

No.:

Examiner: N. Minnifield

For: A POLYPEPTIDE COMPRISING THE AMINO ACID OF AN N-TERMINAL

CHOLINE BINDING PROTEIN A TRUNCATE, VACCINE DERIVED

THEREFROM AND USES THEREOF

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(c)

Sir:

Attached is a list of documents on form PTO-1449. Any foreign patents or non-patent literature documents items are attached, except those that were supplied in, or cited by the Office during prosecution of, parent Application No. 09/056,019 filed April 7, 1998, now U.S. Patent No. 6,858,706. Since the benefit of this application was claimed under 35 U.S.C. 120, no copies need to be furnished in accordance with 37 C.F.R. 1.98(d); however, copies will be furnished on request.

It is requested that the Examiner consider these documents and officially make them of record in accordance with the provisions of 37 C.F.R. § 1.97 and Section 609 of the MPEP. By identifying the listed documents, Applicant in no way makes any admission as to the prior art status of the listed documents, but is instead identifying the listed documents for the sake of full disclosure.

This Information Disclosure Statement is submitted in accordance with 376 F. 10751702 § 1.97(c), before final Office Action or Allowance, whichever is exclusive. 180.00 OP In re: Tuomanen *et al.* Appl. No.: 10/751,702

Filed: 1/5/04

Page 2

A check for the \$180.00 fee specified in 37 C.F.R. § 1.17(p) is enclosed. The Commissioner is authorized to charge any additional fee, or credit any refund, to our Deposit Account No. 16-0605.

Respectfully submitted,

Kelly / willen

Kelly J. Williamson

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Pamela Lockley

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Application Number	10/751,702			
Filing Date	1/5/04			
First Named Inventor	Tuomanen			
Group Art Unit	1645			
Examiner Name	N. Minnifield			
Attorney Docket Number	044158/273011			

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Examiner Initials*	Cite No.				olication Date 4-DD-YYYY			Pages, Columns, Lines, Where Relevant Passages of Relevant Figure Appear			
- ·											
	33 US-6,573,082		06-	03-2003	CHOI et al.		IOI et al.				
	34	US-	6,500,613		12-	31-2002		BRI	LES et al.		
	35	US-6,784,164		08-	31-2004		MASCLE et al.				
	36	US-6,698,369		02-	02-2004 KOENIG et al.						
	37	US-	2002/006154	5	05-	23-2003	CHOI et al.		HOI et al.		
	38	US-	2003/005943	8	03-27-2003		BRILES et al.		ILES et al.		
	39	US-	2003/009157	7	05-15-2003		GILBERT et al.				
	40	US-	2003/009695	0	05-	05-22-2003 TUOM		IANEN et al.			
	41	US-	2003/013844	7	07-	-24-2003		WIZE	MANN et al.		
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Examiner Initials	Cite No.	- 1	Foreign Pate untry Code - Nur known)	ent Document	de	Publication D MM-DD-YY			f Patentee or nt of Cited ent	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	English Language Translation Attached

		OTHER DOCUMENTS		
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue number(s), publisher, city and/or country where published.	English Language Translation Attached	
	42	BROOKS-WLATER, "The pspC Gene of Streptococcus pneumoniae Encodes a Polymorphic Protein, PspC, Which Elicits Cross-Reactive Antibodies to PspA and Provides Immunity to Pneumococcal Bacteremia," Infection and Immunity, 1999, pp. 6533-6542, Vol. 67(12).		
	43	CHENG, Q., et al., "Novel Purification Scheme and Functions for a C3-Binding Protein From Streptococus pneumonia, Biochemistry, 2000, pp. 5450-5457, Vol. 39.		
	44	HOSKINS, J., et al., "Genome of the Bacterium Streptococcus pneumoniae Strain R6," J. of Bacteriology, 2001, pp. 5709-5717, Vol. 183(19).		
	45	IANNELLI, F., et al., "Allelic Variation in the Highly Polymorphic Locus pspC of Streptococcus pneumoniae," Gene, 2002, pp. 63-71, Vol. 284.		
AND THE PROPERTY OF THE PROPER	TETTELIN, H., et al., "Complete Genome Sequence of A Virulent Isolate of Streptococcus pneumoniae," Science, 2001, pp. 498-506, Vol. 293.			
Examiner Signature		Date Considered Considered  Date Considered		

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. LEGAL02/30221320v1

**PATENT** 

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In re:

Tuomanen et al. To be Assigned

Confirmation No.: To be Assigned

Group Art Unit: To be Assigned

Appl No.: Filed:

Concurrently Herewith

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## INFORMATION DISCLOSURE STATEMENT **CITATION UNDER 37 C.F.R. § 1.97**

Attached is a list of documents on form PTO-1449.

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Respectfully submitted.

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Pamela Lockley

RTA01/2147969v1

<u>.</u>

Substitute for form 1449A/PTO Complete if Known **Application Number** To be Assigned INFORMATION **DISCLOSURE** Concurrently Herewith Filing Date STATEMENT BY APPLICANT First Named Inventor Tuomanen Group Art Unit To be Assigned (Use as many sheets as necessary) Examiner Name To be Assigned JAN 1 1 2007 Sheet Attorney Docket Number 044158/273011 of **U. S. PATENT DOCUMENTS** ADENIAS U.S. Patent Document Date of Lines Kind Code<sup>2</sup> Where Relevant Passages of Examiner Cite Name of Patentee or Applicant Publication of Relevant Figures Appear No.1 Initials\* Number (if known) Of Cited Document Cited Document MM-DD-YYYY 1 US-4,925,673 STEINER et al. 05-15-1990 2 US-5,013,556 WOODLE et al. 05-07-1991 3 PLATZ et al. US-5,284,656 02-08-1994 4 US-5,451,569 WONG et al. 09-15-1995 5 US-6,245,335 MASURE et al. 06-12-2001 6 US-6,291,654 HOSTETTER et al. 09-18-2001 7 US-6,420,135 KUNSCH et al. 07-16-2002 8 01-07-2003 WIZEMANN et al. US-6,503,511 FOREIGN PATENT DOCUMENTS Date of Pages, Columns, Lines, Foreign Patent Document T<sup>6</sup> Where Relevant Kind Code Name of Patentee or Applicant Examiner Cite Publication of Passages or Relevant Initials Office3 Number4 (if known) 5 of Cited Document Cited Document No. Figures Appear MM-DD-YYYY 9 EP 401,384 ISHIKAWA, R. 03-13-1996 MASURE, H., et al. 11-06-1997 10 WO 97/41151 1-53 BRILES, D., et al. 03-20-1997 1-28, 40, 53 11 WO 97/09994 HOSTETTER, M., et al. 05-22-1998 1-53 12 WO 98/21337 13 WO KUNSCH, C., et al. 05-07-1998 1-53 98/18930 TUOMANEN, E., et al. 10-14-1999 1-53 14 WO 99/51187 WO WIZEMANN, T., et al. 10-14-1999 1-53 15 99/51266 **OTHER DOCUMENTS** Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volumeissue number(s), publisher, Т

Cite

No.

16

Examiner

Initials

city and/or country where published.

acetate in healthy male volunteers" Pharma Res., 1990, pp. 565-569, Vol. 7.

ADJEI et al., "Pulmonary delivery of peptide drugs: effect of particle size on bioavailability of leuprolide

<sup>&</sup>lt;sup>1</sup> Unique citation designation number.

<sup>&</sup>lt;sup>2</sup> See attached Kinds of U.S. Patent Documents.

<sup>&</sup>lt;sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3).

<sup>&</sup>lt;sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>&</sup>lt;sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

<sup>&</sup>lt;sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



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			Application Number	To be Assigned				
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date	Concurrently Herewith				
			First Named Inventor	Tuomanen				
			Group Art Unit	To be Assigned				
(Use as many sheets as necessary)			Examiner Name	To be Assigned				
Sheet	2	of 2	Attorney Docket Number	044158/273011				
			OTHER DOCUMENTS					
Examiner Initials	Cite No.	magazine, journal, seria	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volumeissue number(s), publisher, city and/or country where published.					
	17		CUNDELL et al., "Receptor specificity of adherence of Streptococcus pneumoniae to human typell pneumocytes and vascular endothelial cells in vitro," Micro Pathog., 1994, pp. 361-374, Vol. 17.					
	18		eptococcus pneumoniae anchor to activire, 1995, pp. 435-438, Vol. 377.	ated human cells by the receptor for platelet				
	19	HAMMERSCHMIDT et al, "SpsA, a novel pneumococcal surface protein with specific binding to secretory immunoglobulin A and secretory component," Mol. Microbiol., 1997, pp. 1113-1124, Vol. 25.  IDANPAAN-HEIKKELA 1., et al., "Oligosaccharides interfere with the establishment and progression of experimental pneumococcal pneumonia," J. Infect. Dis., 1997, pp. 704-712, Vol. 176.						
***************************************	20							
· · · · · · · · · · · · · · · · · · ·	21	LANGER, "New methods of drug delivery," Science, pp. 1527-1533, Vol. 249.						
	22	MALIK et al., "Polyethylene glycol (PEG)modified granulocyte-macrophage colony-stimulating factor (GM-CSF) with conserved biological activity," Exp. Hematol., 1992, pp. 1028-1035, Vol. 20.  MCDANIEL et al., "Molecular localization of variable and conserved regions of pspA and identification of additional pspA homologous sequences in Streptococcus pneumoniae," Microb. Pathog., 1992, pp. 261-269, Vol. 13.						
	23							
	24	NEWMARK et al., "J.	NEWMARK et al., " J. Appl. Biochem., 1982, pp. 185-189, Vol. 4.					
	25	REMINGTON'S PHARMACEUTICAL SCIENCES, 18 <sup>th</sup> ed., 1990, Chap. 89, Mack Publishing Co., Easton, PA.						
	26 RONDA et al., "Biological role of the pneumococcal amidase. Cloning of thelytA gene in Streptococci pneumoniae," Eur. J. Biochem., 1987, pp. 621-624, Vol. 164.							
	27 ROSENOW et al., "Contribution of novel choline-binding proteins to adherence, colonization and immunogenicity of Streptococcus pneumoniae," Mol. Microbiol., 1997, p. 819, Vol. 25.							
**************************************	28		SHAPIRO et al., "The protective efficacy of polyvalent pneumococcal polysaccharide vaccine," NJEM, 1991, p. 1453, Vol. 325.					
	29		TUOMANEN et al., "Phenotypic tolerance: the search for beta-lactam antibiotics that kill nongrowing bacteria. Rev. Infect Dis., 1986, p. 279, Vol. 8, Suppl. 3.					
***************************************	30		TUOMANEN et al., "Microbiological and clinical significance of a new property of defective lysis in clinical strains of pneumococci," J. Infect Dis., 1988, pp. 36-43, Vol. 158.					
***************************************	31	TUOMANEN et al., "Pathogenesis of pneumococcal infection," NEJM, 1995, pp. 1280, Vol. 322.						
***************************************	32	WEARLY, Crit. Rev. ii	n Their Drug Carrier System, 1991, pp	. 333, Vol. 8.				
Examiner Signature				Date Considered				

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